RLF

Transmittal

ROGERS, LOVELOCK & FRITZ, INC.

145 LINCOLN AVENUE
P.O. BOX 730
WINTER PARK, FL 32790-0730

TEL.(407) 647-1039
TELEFAX (407) 629-9409

DATE: March 10, 2003

PROJECT: P625 - Sigonella Main Gate Improvements

TO: Mr. David Sammons, PE
Naval Facilities Engineering Command
Engineering and Design Division, Code CI42
Telephone: (757) 322-4342

JOB NO.: 2040

FROM: David Yates

COPY TO: CAH, file (0-2)

THE FOLLOWING ITEMS ARE BEING SENT: ☐ ATTACHED ☐ STANDARD MAIL ☑ OVERNIGHT ☐ UNDER SEPARATE COVER

☐ DRAWINGS
☐ DATA
☑ REPORTS/ MEETING MINUTES
☐ CORRESPONDENCE
☐ SPECIFICATIONS
☐ CHANGE ORDERS

☐ FOR YOUR INFORMATION
☑ FOR YOUR USE
☐ FOR YOUR ACTION
☐ AS REQUESTED
☐ FOR YOUR COMMENTS/ APPROVAL

☐ SHOP DRAWINGS/ SUBMITTALS
☐ NO EXCEPTIONS TAKEN
☐ MAKE CORRECTIONS NOTED
☐ REVISE AND RESUBMIT
☐ REJECTED

☐ OTHER/ COMMENTS:

COPIES	DATE	DESCRIPTION
1	03/10/2003	Hazardous Materials Report

SIGNED

Architecture
Engineering
Interior Design
Design Automation

FINAL REPORT OF COMPREHENSIVE EVALUATION FOR ASBESTOS-CONTAINING MATERIALS SURVEY, PCB BALLAST, MERCURY VAPOR BULB, AND HEAVY METAL CONTAMINATED COATING,

P-625, BUILDING 701 and 606, SUBSTATION 531, TRANSFORMER 662
SIGONELLA - NAS II
SICILY, ITALY

- Prepared By -

MACTEC ENGINEERING AND CONSULTING, INC.
f/k/a LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
605 E. Robinson Street, Suite 230
Orlando, Florida 32801

MACTEC PROJECT NO. 40280-2-2008//606**

February 25, 2003

MACTEC

February 25, 2003

Mr. Charles A. Hutchinson
Rogers, Lovelock & Fritz, Inc.
145 Lincoln Avenue
Winter Park, Florida 32790-0730

Subject: **Final Report of Asbestos, PCB, Mercury Survey and Lead Based Paint Screening**
Sigonella - NAS II
Sicily, Italy
MACTEC Project 40280-2-2008//606**

Dear Mr. Hutchinson:

MACTEC Engineering and Consulting, Inc. f/k/a Law Engineering and Environmental Services, Inc. (MACTEC) is pleased to present to Rogers, Lovelock & Fritz, Inc. (RLF) this report of our consulting services for Buildings 701, 606, Substation 531, and Transformer 662 for the renovation and demolition project at the Sigonella - NAS II in Sicily, Italy. This report includes a background, findings of our survey and screening, recommendations and supporting documentation.

We appreciate the opportunity to provide our consulting services on this project. If you have any questions or require additional information or services, please contact us.

Sincerely,

MACTEC ENGINEERING AND CONSULTING, INC.

P D S

Paul D. Santone
Project Professional

Brian J. DuChene
Principal Engineer

G:\groups\asbestos\projects\40280-2-2008\2008 rpt.doc

sig with permission

MACTEC Engineering and Consulting, Inc.,
f/k/a Law Engineering and Environmental Services, Inc.
605 E. Robinson St., Suite 230 • Orlando, FL 32801
407-246-0066 • Fax: 407-246-1566

EXECUTIVE SUMMARY

Under a contract agreement between Rogers, Lovelock & Fritz, Inc. (RLF) and MACTEC Engineering and Environmental Services Inc. f/k/a Law Engineering and Environmental Services, Inc. (MACTEC), RLF retained MACTEC to perform an evaluation for asbestos-containing materials (ACM), Polychlorinated Biphenyl (PCB) bearing oils, Mercury, and a screening for lead based paint at specified buildings affected by the planned renovation and demolition project at the Sigonella - NAS II in Sicily, Italy.

The field services were performed on October 31 and November 1, 2002. The following is a summary of findings for each building.

Building 701

A total of 5 homogenous areas of suspect asbestos-containing materials were observed and sampled within the facility. Asbestos-containing Category I materials were identified within the facility include black mastic under vinyl floor tile. No Category II or friable asbestos-containing materials were identified within the facility.

Painted components within the interior and the exterior of the facility were identified to contain lead concentrations greater than 0.06% by weight. Typical components include exterior door frames and exterior wall.

Mercury vapor bulbs were identified within the facility. No PCB ballast were identified.

Building 606

A total of 4 homogenous areas of suspect asbestos-containing materials were observed and sampled within the northwest office area of the facility. No asbestos containing materials were identified within the facility.

No painted components on the interior and exterior of the facility were identified to contain lead concentrations greater than 0.06% by weight.

No mercury vapor bulbs and PCB ballast were identified within the facility.

Substation 531

A total of 1 homogenous area of suspect asbestos-containing material was observed and sampled within the structure. No asbestos containing material was identified within the structure.

No painted components on the interior and exterior of the structure were identified to contain lead concentrations greater than 0.06% by weight.

Transformer 662

No suspect asbestos containing materials were identified or sampled within this transformer unit.

No painted components on the exterior of the transformer were identified to contain lead concentrations greater than 0.06% by weight.

PCB oils were identified in this transformer.

The following is a table of hazardous materials, quantities and removal cost:

SIGONELLA - NAS II MATERIAL, QUANTITY AND OPINION OF COST ESTIMATE			
Building	**Material (ACM)**	**Quantity**	**Removal Cost**
701	Black Mastic associated with nonasbestos-containing gray floor tile	1,600 sq.ft.	$5,600.00
TOTAL			**$5,600.00**

Notes:

- *Cost does not include design specification, project monitoring and final clearance;*
- *Additional Italian regulatory guidelines for the removal and disposal of hazardous materials over and above NESHAPS and OSHA regulations are included;*

TABLE OF CONTENTS

TABLE OF CONTENTS CONTINUED

1.0 PROJECT INFORMATION

Under a contract agreement between Rogers, Lovelock & Fritz, Inc. (RLF) and MACTEC Engineering and Environmental Services Inc. f/k/a Law Engineering and Environmental Services, Inc. (MACTEC), RLF retained MACTEC to perform an evaluation for asbestos-containing materials (ACM), Polychlorinated Biphenyl (PCB) bearing oil, Mercury, and a screening for lead based paint at specified buildings affected by the planned renovation and demolition project at Sigonella – Naval Air Station II, Sicily, Italy.

The scope of work for the project was based upon the Scope Of Work For Performing Asbestos, Lead, PCBs and Mercury screenings for Demolition and Renovation Designs provided by RLF and in accordance with MACTEC's Proposal PA-40299-2-0000/1650 Revision 1 dated September 4, 2002.

MACTEC's services for the project were as follows:

- Review existing documents available for the buildings including previous asbestos and lead based paint surveys, sampling, and abatement activities.
- Obtain representative samples of suspect asbestos-containing materials for analysis by Polarized Light Microscopy.
- Conduct a limited lead based paint screening to locate and identify the approximate extents of paints containing lead within each facility.
- Provide recommendations for the hazardous materials abatement portion of the project.

Buildings 701, Northwest Office Area of 606, Substation 531 and Transformer 662 are addressed in this report.

Building 701 is currently utilized as offices. The structure is a metal structure constructed upon a concrete slab. Interior partitions are drywall and have a suspended ceiling with 2'x 2' lay-in tiles. Finishing materials consist of vinyl tile flooring. HVAC is provided by wall-mounted units. The metal roof is supported by steel truss and deck system. This survey was a limited survey based upon the renovation plans.

Building 606 is currently utilized for Security building offices. The northwest office, where the survey was conducted, consisted of interior partitions of drywall and a suspended ceiling with 2'x 2' lay-in tiles.

Substation 531 is a block wall structure with exterior stucco surfacing coating housing the transformer.

Transformer 662 is a metal unit housing the transformer.

2.0 ASBESTOS SURVEY

2.1 INTRODUCTION

This report section addresses the asbestos survey performed at the Sigonella – Naval Air Station II. In this section, we provide the purpose, scope, and tasks for this survey, and summaries the identified asbestos-containing materials. In Appendix A, we present the following methodologies:

- Standard field and laboratory procedures
- Bulk sampling and assessment procedures
- Assessment procedures
- Conclusions and recommendations for further action

2.2 PURPOSE AND SCOPE

The purpose of this survey was to provide approximate quantities, locations, and the types of ACM present within the various facilities. These findings have been used to develop recommendations for abatement or in-place management of the ACM.

The scope of the asbestos survey for each building included the observation of accessible interior and exterior building components of each building for suspected ACM. The suspect materials observed were categorized by type, homogeneous area, general condition, and friability. A homogeneous area contains material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type, or formulation, of material. The United States Environmental Protection Agency (EPA) has defined as "friable" those materials that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Samplings of homogeneous areas of suspect materials were taken in accordance with current EPA bulk sampling guidelines. This protocol has been found to reduce the likelihood of "false negative" analyses. The samples were analyzed in accordance with Asbestos Hazard Emergency Response Act (AHERA) "first positive analysis" protocol recommended by the EPA.

2.3 SURVEY TASKS

The following tasks were performed as part of this asbestos survey:

1. A visual survey was performed to identify homogeneous areas of suspect ACM and to assess their condition, friability, potential for damage/disturbance and their potential to expose occupants and visitors of the facility to asbestos fibers.

2. Review and provide a summary documenting previous abatement and asbestos activities to assess existing condition of ACM.

3. Samples of accessible suspect materials were collected and analyzed at MACTEC's laboratory following USEPA-recommended procedures. The quantities of sampled and assumed ACM were estimated.

4. Report our findings and present recommendations for further actions, if warranted.

Shawn E. Brigham and Paul D. Santone of MACTEC performed the surveys on October 31 and November 1, 2002. MACTEC utilized accredited asbestos inspectors and management planners in accordance with the EPA Model Accreditation Program (MAP) requirements.

The bulk sample analyses were performed by MACTEC's asbestos laboratory located in Atlanta, Georgia. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP No. 101066) to analyze samples of suspect asbestos-containing material using polarized light microscopy. The bulk sample analysis was performed in accordance with EPA Method 600/R-93/116.

2.4 CONCLUSIONS AND RECOMMENDATIONS

Asbestos-containing material was identified during the survey. If during demolition activities additional suspect asbestos containing materials are revealed, bulk samples should be obtained to determine asbestos content.

3.0 HEAVY METAL CONTAMINATED COATING SCREENING

3.1 INTRODUCTION

This section of the report describes the paint chip survey performed at the various buildings. In this section, we present:

- Paint Screening Procedure and Results
- Conclusions and Recommendations

3.2 PAINT SCREENING PROCEDURES AND RESULTS

The survey included bulk sampling of coatings on the interior and exterior surfaces of each facility. A walk-through was performed to determine the location and approximate extent of the various homogenous painted surfaces. Representative bulk paint chip samples were collected from the various homogenous paint areas. The services were performed by Mr. Shawn E. Brigham, who has successfully completed an EPA approved lead inspector and risk assessor training course.

Samples of paint, down to the substrate, were obtained by scraping and sent to EMSL Analytical, Inc. in Westmont, New Jersey, an American Industrial Hygiene Association ELPAT accredited laboratory (Lab No. 04653), for analysis by Flame Atomic Absorption using EPA SW-846-7420 or AOAC 5.009 (974.02).

3.3 CONCLUSIONS AND RECOMMENDATIONS

The following recommendations are based upon the test data obtained in this survey. If conditions are discovered during renovations that deviate from that data presented in this report, please contact us so that these conditions can be evaluated.

Currently, there are no regulations that require the removal of lead-based paint which apply to these buildings. However, when these coatings are disturbed (scraping and sanding, etc.), the resulting airborne dust concentrations may exceed the Occupational Safety and Health Administration (OSHA) permissible exposure limits for lead. The OSHA regulations require that exposures to construction workers and general industry personnel be controlled by proper work procedures. Any abatement action should utilize the proper engineering controls and comply with the OSHA Construction Standards for Lead (29 CFR 1926.62.

4.0 ROUGH ORDER OF MAGNITUDE OPINION OF COSTS

MACTEC has prepared a preliminary cost estimate for the removal and disposal of asbestos containing materials and disposal of lead based paint.

The referenced table reflects the following information:

- Any additional Italian regulatory guidelines for the removal and disposal of hazardous materials over and above NESHAPS and OSHA regulations;

The following is a table of asbestos containing materials, and lead-based paint quantities and removal/ disposal cost:

SIGONELLA - NAS II
MATERIAL, QUANTITY AND OPINION OF COST ESTIMATE

Building	Material (ACM)	Quantity	Removal Cost
701	Black Mastic associated with nonasbestos-containing gray floor tile	1,600 sq.ft.	$5,600.00
701	Lead-Based Paint Allowance	N/A	$2,500.00
701, 662	PCB Allowance	N/A	$2,500.00
TOTAL			**$10,600.00**

Notes:
- *Cost does not include design specification, project monitoring and final clearance.*

5.0 QUALIFICATIONS

MACTEC has endeavored to observe the existing conditions within the building using generally accepted procedures. Regardless of the thoroughness of our testing, there is always a possibility some areas containing lead based paint and asbestos-containing materials were overlooked or inaccessible, or are different from those specific test locations.

FACILITY DESCRIPTION

BUILDING 701 – DESCRIPTION

Building 701 is currently utilized as offices. The structure is a metal structure constructed upon a concrete slab. Interior partitions are drywall and have a suspended ceiling with 2' x 2' lay-in tiles. Finishing materials consist of vinyl tile flooring. HVAC is provided by wall-mounted units. The metal roof is supported by steel truss and deck system.

SUMMARY OF ASBESTOS CONTAINING MATERIALS

Table of Confirmed Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Building 701
LAW Project 40280-2-2008//606**

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

ASBESTOS FIELD DATA FORMS

PHYSICAL ASSESSMENT FORM Page 1 of 4

Building/Facility: P-635 BASE OPERATIONS SUPPORT NAS II - SIGONELLA, ITALY Project No: 40280-2-2008/X/6

Material Description: DRYWALL | JOINT COMPOUND Date 11-1-02

Sample No(s):	701-1A	701-1B	701-1C				
Location:	8	7	2				

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qu

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable I

Asbestos Type 1: CH AM CR AN TR ACT (Dm, AC) ____ % Total

Asbestos Type 2: CH AM CR AN TR ACT ____ % Quantity: ____

CONDITION

% Damage: ✓ 0-10% ____ 10-25% ____ >25% ____ Localized ____ Distributed throughout area

Damage due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: ____

Overall Rating: ✓ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ✓ Accessible ____ Inaccessible

Description: ____

Potential for Contact: ____ High ____ Moderate ✓ Low

Description: ____

Influence of Vibration: ____ High ____ Moderate ✓ Low

Description of Source: ____

Potential for Air Erosion: ____ Yes ✓ No

Description: ____

Material Located in a Plenum? ____ Yes ✓ No ____ Supply ____ Return Air

Overall Rating: ____ High ____ Medium ✓ Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: ____ Date: ____ Certificate No: ____ State of Accreditation: ____

PHYSICAL ASSESSMENT FORM Page 2 of 2

Building/Facility: P-635 BASE OPERATIONS SUPPORT NAS II - SIGONELLA, ITALY Project No: 40280-2-2008/x/60

Material Description: 12"x12" (GRAY) FLOOR TILE/MASTIC Date 11-1-02

Sample No(s):	701-2A	701-2B	701-2C				
Location:	7	7	7				

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable (I)

Asbestos Type 1: (CH) AM CR AN TR ACT 5 % BLACK MASTIC Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: 1600 sq.

CONDITION

% Damage: ✓ 0-10% ____ 10-25% ____ >25% ____ Localized ____ Distributed throughout area

Damage due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: _____

Overall Rating: ✓ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ✓ Accessible ____ Inaccessible

Description: _____

Potential for Contact: ____ High ____ Moderate ✓ Low

Description: _____

Influence of Vibration: ____ High ____ Moderate ✓ Low

Description of Source: _____

Potential for Air Erosion: ____ Yes ✓ No

Description: _____

Material Located in a Plenum? ____ Yes ✓ No ____ Supply ____ Return Air

Overall Rating: ____ High ____ Medium ✓ Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM Page 4 of 8

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY Project No: 40280-2-2008/X/60

Material Description: 2x2' LAY IN CEILING TILES Date 11-103

Sample No(s):	701-3A	701-3B	701-3C				
Location:	8	7	1				

Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua

Functional Spaces Included:

Material Type: Surfacing TSI (Misc) NESHAP Category: (Friable) I

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: ✓ 0-10% ____ 10-25% ____ >25% ____ Localized ____ Distributed throughout area

Damage due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: _____

Overall Rating: ____ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ____ Accessible ✓ Inaccessible

Description: _____

Potential for Contact: ____ High ____ Moderate ✓ Low

Description: _____

Influence of Vibration: ____ High ____ Moderate ✓ Low

Description of Source: _____

Potential for Air Erosion: ____ Yes ✓ No

Description: _____

Material Located in a Plenum? ____ Yes ✓ No ____ Supply ____ Return Air

Overall Rating: ____ High ____ Medium ✓ Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/60

Material Description: (BLACK) VINYL COVE BASE

Date 11-1-02

Sample No(s):	701-4A	701-4B	701-4C				
Location:	7	7	7				

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Quan
	-							

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable (I)

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: 0-10 % 10-25 % > 25 % Localized Distributed throughout area

Damage due to: Deterioration Water Physical Repairs Renovations

Description: _____

Overall Rating: Not Damaged Damaged Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: Accessible Inaccessible

Description: _____

Potential for Contact: High Moderate Low

Description: _____

Influence of Vibration: High Moderate Low

Description of Source: _____

Potential for Air Erosion: Yes No

Description: _____

Material Located in a Plenum? Yes No Supply Return Air

Overall Rating: High Medium Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM

Page 3 of 5

Building/Facility: P-635 BASE OPERATIONS SUPPORT NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/60

Material Description: EXTERIOR METAL SEAM CAULK

Date 11-1-02

Sample No(s):	701-JA	701-JB	701-JC				
Location:	EXTERIOR						

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua
		3000 L.F.						

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable (I)

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: (0-10%) 10-25% >25% Localized Distributed throughout area

Damage due to: Deterioration Water Physical Repairs Renovations

Description: _____

Overall Rating: (Not Damaged) Damaged Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: (Accessible) Inaccessible

Description: _____

Potential for Contact: High Moderate (Low)

Description: _____

Influence of Vibration: High (Moderate) Low

Description of Source: _____

Potential for Air Erosion: (Yes) No

Description: _____

Material Located in a Plenum? Yes (No) Supply Return Air

Overall Rating: High (Medium) Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

ASBESTOS BULK-SAMPLING LABORATORY SHEETS

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client :	P-625 Building #701	Law Job No. :	40280-2-2008-606
Project :	Building #701	Report Date :	11/14/2002
Client Project No.:	N/A	Sample Date :	11/1/02
Identification :	Asbestos, Bulk Sample Analysis		
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		

STATEMENT OF LABORATORY ACCREDITATION

These samples were analyzed at the Atlanta Branch of Law Engineering in the Asbestos Laboratory at 396 Plasters Ave. NE, Atlanta, GA, 30324. The laboratory holds accreditation from the National Institute of Standards and Technology (formerly National Bureau of Standards) under the National Voluntary Laboratory Accreditation Program (NVLAP). This laboratory also is licensed and authorized to perform as an Asbestos Laboratory in the State of Texas within the purview of Texas Civil Statutes, Article 4477-3a, as amended, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

The samples were analyzed by polarized light microscopy in general accordance with the procedures described in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116. The results of each bulk sample analysis relate only to the material tested. This report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Specific questions concerning bulk sample results shall be directed to the PLM Laboratory Manager.

Analyst : Carol Findlay

PLM Laboratory Manager : Carol Findlay

Approved Signatory : Carol Findlay

NVLAP

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client : P-625 Building #701
Project : Building #701
Client Project No.: N/A
Identification : Asbestos, Bulk Sample Analysis
Test Method : Polarized Light Microscopy / Dispersion Staining (PLM/DS)
EPA Method 600/R-93/116

Law Job No. : 40280-2-2008-606
Report Date : 11/14/2002
Sample Date : 11/1/02

On 11/14/2002, fifteen (15) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140462	Drywall and Joint Compound Room #8 701-1A	None Detected-Drywall None Detected-Paint
140463	Drywall and Joint Compound Room #1 701-1B	None Detected-Drywall None Detected-Paint
140464	Drywall and Joint Compound Room #2 701-1C	None Detected-Drywall None Detected-Paint
140465	12" x 12" Gray Floor Tile and Mastic Room #1 701-2A	None Detected-Floor Tile None Detected-Leveling Compound 5% Chrysotile-Black Mastic
140466	12" x 12" Gray Floor Tile and Mastic Room #1 701-2B	None Detected-Floor Tile Not Analyzed-Black Mastic
140467	12" x 12" Gray Floor Tile and Mastic Room #1 701-2C	None Detected-Floor Tile None Detected-Yellow Mastic
140468	2' x 2' Lay-In Ceiling Tile Room #8 701-3A	None Detected-Ceiling Tile None Detected-Paint

These samples were analyzed by layers. The first percentage is the overall asbestos content for the sample. Specific layer or component asbestos content is indicated wh relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also state that Regulated Asbestos Containing Materials (RACM) -- materials which are friable or may become friable -- be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Our laboratory utilizes CVAE on a routine basis and does not include point counting unless specifically requested.

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client : P-625 Building #701
Project : Building #701
Client Project No.: N/A
Identification : Asbestos, Bulk Sample Analysis
Test Method : Polarized Light Microscopy / Dispersion Staining (PLM/DS)
EPA Method 600/R-93/116

Law Job No. : 40280-2-2008-606
Report Date : 11/14/2002
Sample Date : 11/1/02

On 11/14/2002, fifteen (15) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140469	2' x 2' Lay-In Ceiling Tile Room #1 701-3B	None Detected-Ceiling Tile None Detected-Paint
140470	2' x 2' Lay-In Ceiling Tile Room #1 701-3C	None Detected-Ceiling Tile None Detected-Paint
140471	Black Vinyl Cove Base Room #7 701-4A	None Detected-Cove Base None Detected-Yellow Mastic
140472	Black Vinyl Cove Base Room #7 701-4B	None Detected-Cove Base None Detected-Yellow Mastic None Detected-Black Mastic
140473	Black Vinyl Cove Base Room #7 701-4C	None Detected-Cove Base None Detected-Yellow Mastic
140474	Exterior Wall Caulk Exterior 701-5A	None Detected-Exterior Wall Caulk
140475	Exterior Wall Caulk Exterior 701-5B	None Detected-Exterior Wall Caulk

These samples were analyzed by layers. The first percentage is the overall asbestos content for the sample. Specific layer or component asbestos content is indicated wh relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also state that Regulated Asbestos Containing Materials (RACM) -- materials which are friable or may become friable -- be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Our laboratory utilizes CVAE on a routine basis and does not include point counting unless specifically requested.

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client : P-625 Building #701
Project : Building #701
Client Project No.: N/A
Identification : Asbestos, Bulk Sample Analysis
Test Method : Polarized Light Microscopy / Dispersion Staining (PLM/DS)
EPA Method 600/R-93/116

Law Job No. : 40280-2-2008-606
Report Date : 11/14/2002
Sample Date : 11/1/02

On 11/14/2002, fifteen (15) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140476	Exterior Wall Caulk Exterior 701-5C	None Detected-Exterior Wall Caulk

These samples were analyzed by layers. The first percentage is the overall asbestos content for the sample. Specific layer or component asbestos content is indicated wh relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also state that Regulated Asbestos Containing Materials (RACM) -- materials which are friable or may become friable -- be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Our laboratory utilizes CVAE on a routine basis and does not include point counting unless specifically requested. These reports may not be reproduced except in full. Any unauthorized use or distribution of these reports shall be at the client's and recipient's sole risk and without liability to Law Engineering.

SUMMARY OF LEAD-BASED PAINT FINDINGS

LEAD-BASED PAINT SAMPLING FORM

JOB NAME: P-625 Base Operations Support – Sigonella NAS II. Sicily, Italy **JOB NO.:** 40280-2-2008 **PHASE:** ** **TASK:** 606

BUILDING: # 701 **DATE:** 11/1/02 **SAMPLED BY:** SEB

SAMPLE NO.	FLOOR	COLOR	COMPONENT	LOCATION / HA	SUBSTRATE	ORIENTATION	CONDITION	Pb%
L701-1	0	Lt. Blue	Wall (I)	Rm 8	D	West (L)	I	<0.01
COMMENTS	Typical of Interior Office finishes							
L701-2	0	Brown	Door/Frame (I)	Rm 9 / Exterior	M	West (L)	I	0.20
COMMENTS	5 Exterior access doors and frames							
L701-3	0	Beige	Wall (E)	Exterior	M	South (M)	I	0.10
COMMENTS	Typical exterior coating							
L701-4	0	Beige	Wall (E)	Exterior	C	West (L)	I	<0.01
COMMENTS	Typical exterior coating							
L701-5	0	White	Window Recess	Rm 8	W	West (U)	I	<0.01
COMMENTS	Typical of Interior Office finishes							
COMMENTS								
COMMENTS								

SUBSTRATE:

W = Wood
M = Metal
C = Concrete
V = Vinyl
D = Drywall
P = Plaster
S = Stucco
L = Laminate
B = Brick
CER = Ceramic
WP = Wallpaper
PL = Plastic

WALL HEIGHT:

(U) = Upper Wall (M) = Mid Wall (L) = Lower Wall

CONDITION:

I = Intact
F = Fair
P = Poor
FR = Friction
IM = Impact
M = Moisture

COMPONENT ASPECT:

(I) = Interior Surface (E) = Exterior Surface

BULK PAINT CHIP LABORATORY REPORT

EMSL Analytical
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

Attn: Shawn Brigham
Law Engineering
605 East Robinson St.
Suite 230
Orlando, FL 32801
Fax: (407) 246-1566 Phone: 407-246-0066
Project: **P625 NASI /40280-2-2008/x/606 Bldg 701**

Customer ID: LAWE52H
Customer PO: 27944
Received: 11/14/02 9:40 AM

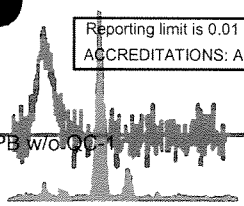
EMSL Order: 200211342
EMSL Project ID:

Lead in Paint Chips by Flame AAS (SW 846, 7420)

Client Sample Description	*Lab ID*	*Analyzed*	*Lead Concentration*
L-701-1	*0001*	11/21/02	<0.01 % wt
L-701-2	*0002*	11/21/02	0.20 % wt
L-701-3	*0003*	11/21/02	0.10 % wt
L-701-4	*0004*	11/21/02	<0.01 % wt
L-701-5	*0005*	11/21/02	<0.01 % wt

Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP: 04653
AIHA: 100194
or other approved signatory

Reporting limit is 0.01 % wt.
ACCREDITATIONS: AIHA Environmental Lead Laboratory Approval Program # 100194



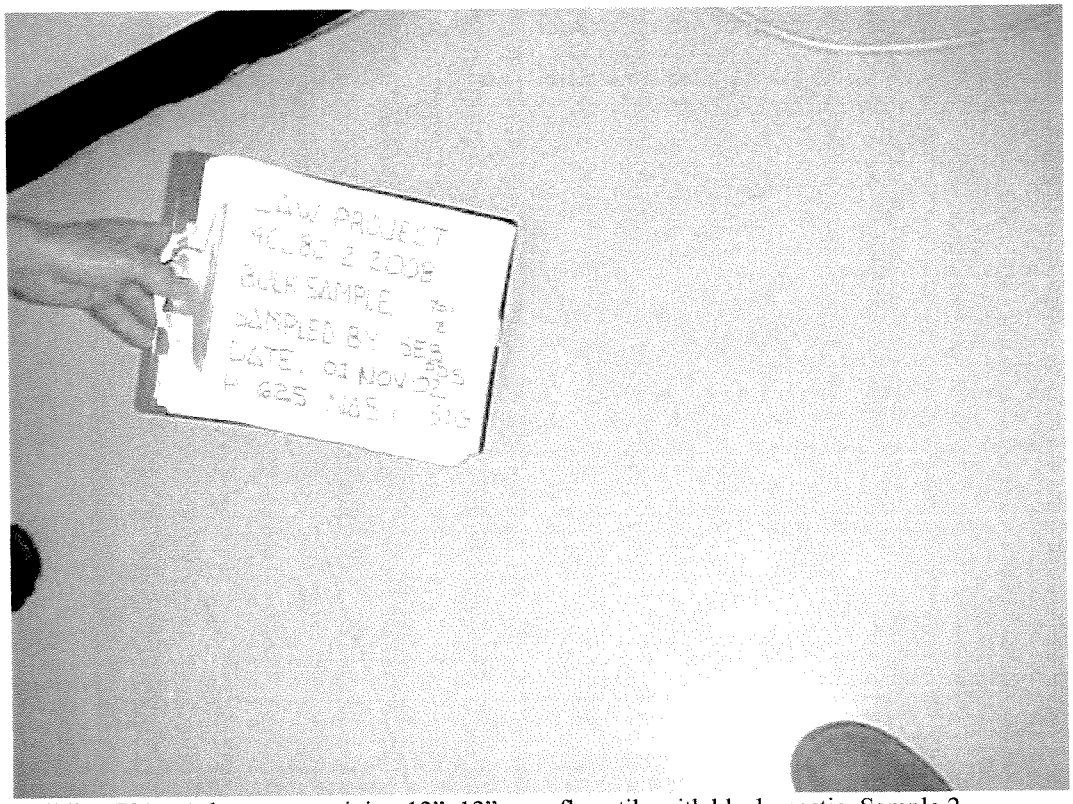
PCB BALLAST AND MERCURY VAPOR LIGHTING DATA FORM

Mercury Light and PCB Ballast
Summary Sheet
P-625 Base Operations Support – Sigonella NAS II, Sicily, Italy
LAW Project 40280-2-2008/**/606

Building # 701

Room Number	Description	Number of Fixtures	Total Number of Ballasts	Total Number of Bulbs
1	6"x4' Covered	4	0	8
2	6"x4' Covered	1	0	2
3	6"x4' Covered	1	0	2
4	2'x2' Covered	1	0	2
4	6"x4' Covered	2	0	8
5	6"x4' Covered	2	0	4
6	6"x4' Covered	2	0	4
7	3'x3' Covered	1	0	4
8	6"x4' Covered	4	0	8
9	6"x4' Covered	1	0	1
10	6"x4' Covered	3	0	6
11	6"x4' Covered	2	0	4
Exterior	-	-	-	-

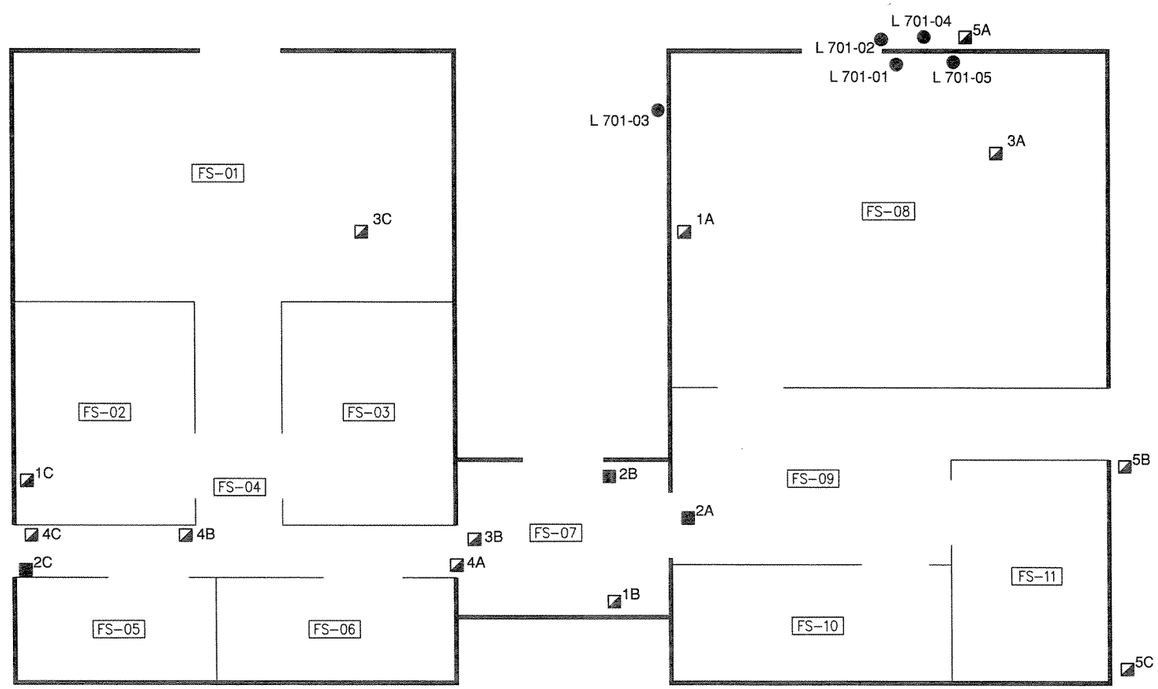
PHOTOGRAPHS



Building 701 – Asbestos-containing 12"x12" gray floor tile with black mastic, Sample 2.

Building 701 Overview

DRAWINGS



BUILDING #701- PLAN VIEW
SCALE: NTS

LEGEND

- 'X' – POSITIVE ASBESTOS-CONTAINING SAMPLE LOCATION
- 'X' – NEGATIVE ASBESTOS-CONTAINING SAMPLE LOCATION
- 'X' – LEAD BASED PAINT SAMPLE LOCATION
- FS.-XX – FUNCTIONAL SPACE

MACTEC
MACTEC ENGINEERING AND CONSULTING, INC.
605 E. ROBINSON STREET, SUITE 230 ORLANDO, FL 32801
PHONE: (407) 246-0066 FAX: (407)246-1566
EB 7428 / ZA0000116

PROJECT NAME
BUILDING # 701 - COMMAND CAREER COUNSELOR AND FINANCIAL SPECIALIST
P-625, SIGONELLA – NASII
SICILY, ITALY

REVISIONS

NO.	DATE

DRAWN BY: IM
CHECKED BY: PDS
DATE DRAWN: 01.08.03
PROJECT #: 40280-2-2008
PHASE: **
TASK: 506

DRAWING TITLE
ASBESTOS-LEAD SAMPLE LOCATION PLAN

FIGURE SHEET
AS-1

FACILITY DESCRIPTION

BUILDING 606 - DESCRIPTION

Building 606 is currently utilized as the security building offices. The first floor northwest offices, where the survey was conducted, consisted of interior partitions of drywall and a suspended ceiling with 2' x 2' lay-in tiles. The exterior is a stucco finish.

SUMMARY OF ASBESTOS CONTAINING MATERIALS

Table of Confirmed Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Building 606
LAW Project 40280-2-2008/**/606

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.
4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).
6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).
8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

Table of Confirmed Non-Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Building 606
LAW Project 40280-2-2008/**/606

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

ASBESTOS FIELD DATA FORMS

PHYSICAL ASSESSMENT FORM

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/60

Material Description: DRYWALL JOINT COMPOUND

Date 10-31-02

Sample No(s):	606 1A	606 1B	606-1C				
Location:	SECURITY OFFICE →						

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua
	TOTAL	100 S.F.						

Material Type: Surfacing TSI (Misc)

NESHAP Category: Friable I

Asbestos Type 1: CH AM CR AN TR ACT _____ %

Asbestos Type 2: CH AM CR AN TR ACT _____ %

Total Quantity: _____

CONDITION

% Damage: ____0-10% ____10-25% ____>25% ___/Localized ____Distributed throughout area

Damage due to: ____Deterioration ____Water ___/Physical ____Repairs ____Renovations

Description: _____

Overall Rating: ____Not Damaged ___/Damaged ____Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ___/Accessible ____Inaccessible

Description: _____

Potential for Contact: ____High ___/Moderate ____Low

Description: _____

Influence of Vibration: ____High ___/Moderate ____Low

Description of Source: _____

Potential for Air Erosion: ____Yes ___/No

Description: _____

Material Located in a Plenum? ____Yes ___/No ____Supply ____Return Air

Overall Rating: ____High ___/Medium ____Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/6

Material Description: BROWN COVE BASE & ADHESIVE

Date 10-31-02

Sample No(s):	606-3A							
Location:	SECURITY OFFICE							
Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qu
		3 OF F.						

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable (I)

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: ___/___ 0-10 % ____ 10-25 % ____ > 25 % ____ Localized ____ Distributed throughout area

...ge due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: _____

Overall Rating: ___/___ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ____ Accessible ___/___ Inaccessible

Description: _____

Potential for Contact: ____ High ____ Moderate ___/___ Low

Description: _____

Influence of Vibration: ____ High ____ Moderate ___/___ Low

Description of Source: _____

Potential for Air Erosion: ____ Yes ___/___ No

Description: _____

...terial Located in a Plenum? ____ Yes ___/___ No ____ Supply ____ Return Air

...rall Rating: ____ High ____ Medium ___/___ Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/6C

Material Description: 2x2 LAY-IN CEILING TILE

Date 10-31-02

Sample No(s):	60C-3A							
Location:	SECURITY OFFICE							
Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qu
		205 S.F						

Material Type: Surfacing TSI (Misc) NESHAP Category: (Friable) I

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: ✓ 0-10% ____ 10-25% ____ >25% ____ Localized ____ Distributed throughout area

Damage due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: _____

Overall Rating: ✓ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ____ Accessible ✓ Inaccessible

Description: _____

Potential for Contact: ____ High ____ Moderate ✓ Low

Description: _____

Influence of Vibration: ____ High ____ Moderate ✓ Low

Description of Source: _____

Potential for Air Erosion: ____ Yes ✓ No

Description: _____

Material Located in a Plenum? ____ Yes ✓ No ____ Supply ____ Return Air

Overall Rating: ____ High ____ Medium ✓ Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

PHYSICAL ASSESSMENT FORM Page 1 of 4

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY Project No: 40280-2-2008/X/60

Material Description: EXTERIOR STUCCO Date 10-31-02

Sample No(s): GOG-4A | GOG 4B | GOG-4C

Location: SECURITY OFFICE →

Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua

Functional Spaces Included:

Material Type: Surfacing TSI Misc NESHAP Category: Friable I

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: _____0-10% _____10-25% _____>25% _____Localized _____Distributed throughout area

Damage due to: _____Deterioration _____Water _____Physical _____Repairs _____Renovations

Description: _____

Overall Rating: _____Not Damaged _____Damaged _____Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: _____Accessible _____Inaccessible

Description: _____

Potential for Contact: _____High _____Moderate _____Low

Description: _____

Influence of Vibration: _____High _____Moderate _____Low

Description of Source: _____

Potential for Air Erosion: _____Yes _____No

Description: _____

Material Located in a Plenum? _____Yes _____No _____Supply _____Return Air

Overall Rating: _____High _____Medium _____Low

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

ASBESTOS BULK-SAMPLING LABORATORY SHEETS

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client :	P-635 Building #606	Law Job No. :	40280-2-2008-606
Project :	Security Building - N.W. Office	Report Date :	11/20/2002
Client Project No.:	N/A	Sample Date :	11/1/02
Identification :	Asbestos, Bulk Sample Analysis		
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		

STATEMENT OF LABORATORY ACCREDITATION

These samples were analyzed at the Atlanta Branch of Law Engineering in the Asbestos Laboratory at 396 Plasters Ave. NE, Atlanta, GA, 30324. The laboratory holds accreditation from the National Institute of Standards and Technology (formerly National Bureau of Standards) under the National Voluntary Laboratory Accreditation Program (NVLAP). This laboratory also is licensed and authorized to perform as an Asbestos Laboratory in the State of Texas within the purview of Texas Civil Statutes, Article 4477-3a, as amended, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

The samples were analyzed by polarized light microscopy in general accordance with the procedures described in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116. The results of each bulk sample analysis relate only to the material tested. This report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Specific questions concerning bulk sample results shall be directed to the PLM Laboratory Manager.

Analyst : Carol Findlay

PLM Laboratory Manager : Carol Findlay

Approved Signatory : Carol Findlay

NVLAP

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client : P-635 Building #606
Project : Security Building - N.W. Office
Client Project No.: N/A
Identification : Asbestos, Bulk Sample Analysis
Test Method : Polarized Light Microscopy / Dispersion Staining (PLM/DS)
EPA Method 600/R-93/116

Law Job No. : 40280-2-2008-606
Report Date : 11/20/2002
Sample Date : 11/1/02

On 11/19/2002, eight (8) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140691	Drywall and Joint Compound Security Office 606-1A	None Detected-Drywall None Detected-Paint
140692	Drywall and Joint Compound Security Office 606-1B	None Detected-Drywall
140693	Drywall and Joint Compound Security Office 606-1C	None Detected-Drywall None Detected-Paint
140694	Brown Cove Base and Adhesive Security Office 606-2A	None Detected-Cove Base None Detected-Yellow Mastic
140695	2' x 2' Lay-In Ceiling Tile Security Office 606-3A	None Detected-Ceiling Tile None Detected-Paint
140696	Exterior Stucco Exterior Walls 606-4A	None Detected-Exterior Stucco None Detected-Paint
140697	Exterior Stucco Exterior Walls 606-4B	None Detected-Exterior Stucco None Detected-Paint

These samples were analyzed by layers. The first percentage is the overall asbestos content for the sample. Specific layer or component asbestos content is indicated wh relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also state that Regulated Asbestos Containing Materials (RACM) -- materials which are friable or may become friable -- be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Our laboratory utilizes CVAE on a routine basis and does not include point counting unless specifically requested.

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client :	P-635 Building #606	Law Job No. :	40280-2-2008-606
Project :	Security Building - N.W. Office	Report Date :	11/20/2002
Client Project No.:	N/A	Sample Date :	11/1/02
Identification :	Asbestos, Bulk Sample Analysis		
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		

On 11/19/2002, eight (8) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140698	Exterior Stucco Exterior Walls 606-4C	None Detected-Exterior Stucco None Detected-Paint

SUMMARY OF LEAD-BASED PAINT FINDINGS

LEAD-BASED PAINT SAMPLING FORM

JOB NAME: P-625 Base Operations Support – Sigonella NAS II. Sicily, Italy **JOB NO.:** 40280-2-2008 **PHASE:** ** **TASK:** 606

BUILDING: # 606 – Northwest Office **DATE:** 10/31/02 **SAMPLED BY:** SEB

SAMPLE NO.	FLOOR	COLOR	COMPONENT	LOCATION / HA	SUBSTRATE	ORIENTATION	CONDITION	Pb%
L606-1	0	Yellow	Wall (I)	Admin Office	D	West (L)	I	<0.01
COMMENTS	Typical Office Area							
L606-2	0	Mustard	Wall (I)	Hallway	D	North (L)	I	<0.01
COMMENTS	Lower 1/3 of wall in hallway							
L606-3	0	Beige	Wall (E)	Exterior	P	North (M)	I	<0.01
COMMENTS	Typical of upper perimeter							
L606-4	0	Brown	Wall (E)	Exterior	P	North (L)	I	<0.01
COMMENTS	Typical of base perimeter							
COMMENTS								
COMMENTS								
COMMENTS								

SUBSTRATE:

W = Wood
M = Metal
C = Concrete
V = Vinyl
D = Drywall
P = Plaster
S = Stucco
L = Laminate
B = Brick
CER = Ceramic
WP = Wallpaper
PL = Plastic

WALL HEIGHT:

(U) = Upper Wall (M) = Mid Wall (L) = Lower Wall

CONDITION:

I = Intact
F = Fair
P = Poor
FR = Friction
IM = Impact
M = Moisture

COMPONENT ASPECT:

(I) = Interior Surface (E) = Exterior Surface

BULK PAINT CHIP LABORATORY REPORT

EMSL Analytical
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

RECEIVED DEC 9 2002

EMSL

Attn: Law Engineering
605 East Robinson St.
Suite 230
Orlando, FL 32801
Fax: (407) 246-1566 Phone: 407-246-0066
Project: **NAS II P-635 40280-2-2008/x/606 / Bldg 606**

Customer ID: LAWE52H
Customer PO: 27944
Received: 11/14/02 9:40 AM

EMSL Order: 200211398
EMSL Project ID:

Lead in Paint Chips by Flame AAS (SW 846, 7420)

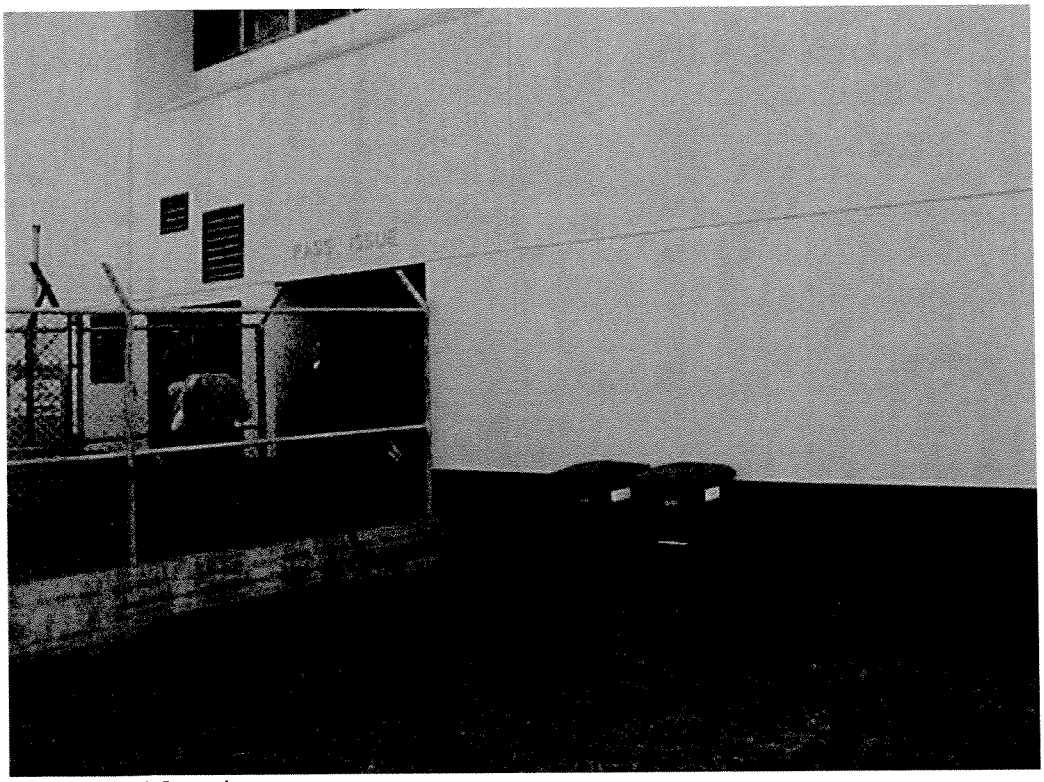
Client Sample Description	*Lab ID*	*Analyzed*	*Lead Concentration*
L606-1	*0001*	11/21/02	<0.01 % wt
L606-2	*0002*	11/21/02	<0.01 % wt
L606-3	*0003*	11/21/02	<0.01 % wt
L606-4	*0004*	11/21/02	<0.01 % wt

Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP: 04653
AIHA: 100194
or other approved signatory

Reporting limit is 0.01 % wt.
ACCREDITATIONS: AIHA Environmental Lead Laboratory Approval Program # 100194

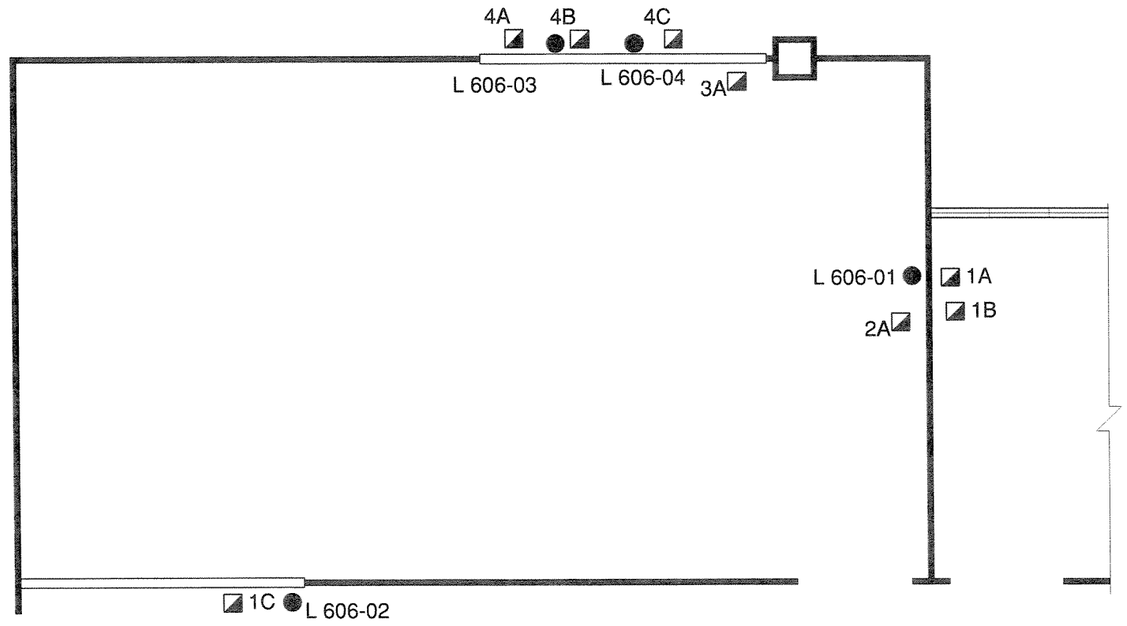
PHOTOGRAPHS

Building 606 – Overview



Building 606 Overview

DRAWINGS



BUILDING #606– PLAN VIEW
SCALE: NTS

N

LEGEND

- 'X' – POSITIVE ASBESTOS–CONTAINING SAMPLE LOCATION
- 'X' – NEGATIVE ASBESTOS–CONTAINING SAMPLE LOCATION
- 'X' – LEAD BASED PAINT SAMPLE LOCATION
- FS.–XX – FUNCTIONAL SPACE

MACTEC
MACTEC ENGINEERING AND CONSULTING, INC.
605 E. ROBINSON STREET . SUITE 230 ORLANDO, FL 32801
PHONE: (407) 246-0066 FAX: (407)246-1566
EB 7428 / ZA0000116

PROJECT NAME
BUILDING #606
P-625, SIGONELLA - NAS II
SICILY, ITALY

REVISIONS

NO.	DATE

DRAWN BY: IM
CHECKED BY: PDS
DATE DRAWN: 01.08.03
PROJECT #: 40280–2–2008
PHASE: **
TASK: 606

DRAWING TITLE
ASBESTOS-
LEAD SAMPLE
LOCATION
PLAN

FIGURE SHEET
AS-1

FACILITY DESCRIPTION

TRANSFORMER 662 - DESCRIPTION

Transformer 662 is housed in a metal unit.

SUMMARY OF ASBESTOS CONTAINING MATERIALS

Table of Confirmed Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Substation 531
LAW Project 40280-2-2008/**/606

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

Table of Confirmed Non-Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Substation 531
LAW Project 40280-2-2008/**/606

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

ASBESTOS FIELD DATA FORMS

PHYSICAL ASSESSMENT FORM

Page 1 of 1

P-635 BASE OPERATIONS SUPPORT

Building/Facility: NAS II - SIGONELLA, ITALY

Project No: 40280-2-2008/x/60

Material Description: EXTERIOR STUCCO

Date 11.1.02

Sample No(s):	531-1A	531-1B	531-1C				
Location:	EXTERIOR						

Functional Spaces Included:	Area #	Quantity	Area #	Quantity	Area #	Quantity	Area #	Qua

Material Type: Surfacing TSI (Misc) NESHAP Category: Friable I

Asbestos Type 1: CH AM CR AN TR ACT _____ % Total

Asbestos Type 2: CH AM CR AN TR ACT _____ % Quantity: _____

CONDITION

% Damage: ✓ 0-10% ____ 10-25% ____ >25% ____ Localized ____ Distributed throughout area

Damage due to: ____ Deterioration ____ Water ____ Physical ____ Repairs ____ Renovations

Description: _____

Overall Rating: ✓ Not Damaged ____ Damaged ____ Significantly Damaged

POTENTIAL FOR DISTURBANCE

Accessibility: ✓ Accessible ____ Inaccessible

Description: _____

Potential for Contact: ____ High ____ Moderate ✓ Low

Description: _____

Influence of Vibration: ____ High ____ Moderate ✓ Low

Description of Source: _____

Potential for Air Erosion: ✓ Yes ✓ No

Description: _____

Material Located in a Plenum? ____ Yes ✓ No ____ Supply ____ Return Air

Overall Rating: ____ High ____ Medium (Low)

RISK ASSESSMENT: 1 2 3 4 5 6 7 8

By: _____ Date: _____ Certificate No: _____ State of Accreditation: _____

ASBESTOS BULK-SAMPLING LABORATORY SHEETS

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client :	P-625 Building #531 (SUBSTATION)	Law Job No. :	40280-2-2008-606
Project :	Sub Station	Report Date :	11/15/2002
Client Project No.:	N/A	Sample Date :	11/1/02
Identification :	Asbestos, Bulk Sample Analysis		
Test Method :	Polarized Light Microscopy / Dispersion Staining (PLM/DS) EPA Method 600/R-93/116		

STATEMENT OF LABORATORY ACCREDITATION

These samples were analyzed at the Atlanta Branch of Law Engineering in the Asbestos Laboratory at 396 Plasters Ave. NE, Atlanta, GA, 30324. The laboratory holds accreditation from the National Institute of Standards and Technology (formerly National Bureau of Standards) under the National Voluntary Laboratory Accreditation Program (NVLAP). This laboratory also is licensed and authorized to perform as an Asbestos Laboratory in the State of Texas within the purview of Texas Civil Statutes, Article 4477-3a, as amended, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

The samples were analyzed by polarized light microscopy in general accordance with the procedures described in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/R-93/116. The results of each bulk sample analysis relate only to the material tested. This report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Specific questions concerning bulk sample results shall be directed to the PLM Laboratory Manager.

Analyst : Carol Findlay

PLM Laboratory Manager : Carol Findlay

Approved Signatory : Carol Findlay

NVLAP

PLM REPORT SUMMARY

Law Engineering and Environmental Services, Inc.
396 Plasters Ave. NE
Atlanta, GA 30324 (404) 873-4761

NVLAP Lab No. 101066
TDH License No. 30-0162

Client : P-625 Building #531 (SUBSTATION)
Project : Sub Station
Client Project No.: N/A
Identification : Asbestos, Bulk Sample Analysis
Test Method : Polarized Light Microscopy / Dispersion Staining (PLM/DS)
EPA Method 600/R-93/116

Law Job No. : 40280-2-2008-606
Report Date : 11/15/2002
Sample Date : 11/1/02

On 11/14/2002, three (3) bulk material samples were submitted by Shawn Brigham for asbestos analysis by PLM/DS.

Lab Sample No.	Sample Description / Location	Asbestos Content
140477	Exterior Stucco Exterior Walls 531-1A	None Detected-Exterior Stucco
140478	Exterior Stucco Exterior Walls 531-1B	None Detected-Exterior Stucco
140479	Exterior Stucco Exterior Walls 531-1C	None Detected-Exterior Stucco

These samples were analyzed by layers. The first percentage is the overall asbestos content for the sample. Specific layer or component asbestos content is indicated wh relevant. The EPA considers a material to be asbestos containing only if it contains more than one percent asbestos by Calibrated Visual Area Estimation (CVAE). EPA regulations also state that Regulated Asbestos Containing Materials (RACM) -- materials which are friable or may become friable -- be further analyzed by point counting when the results indicate less than ten percent asbestos by CVAE. Our laboratory utilizes CVAE on a routine basis and does not include point counting unless specifically requested. These reports may not be reproduced except in full. Any unauthorized use or distribution of these reports shall be at the client's and recipient's sole risk and without liability to Law Engineering.

SUMMARY OF LEAD-BASED PAINT FINDINGS

LEAD-BASED PAINT SAMPLING FORM

JOB NAME: P-625 Base Operations Support – Sigonella NAS II. Sicily, Italy **JOB NO.:** 40280-2-2008 **PHASE:** ** **TASK:** 606

BUILDING: # 531 - Substation **DATE:** 11/1/02 **SAMPLED BY:** SEB

SAMPLE NO.	FLOOR	COLOR	COMPONENT	LOCATION / HA	SUBSTRATE	ORIENTATION	CONDITION	Pb%
L531-1	0	Beige	Wall (E)	Exterior	P	North (L)	I	<0.01
COMMENTS								
L531-2	0	Brown	Wall (E)	Exterior	P	West (L)	I	<0.01
COMMENTS								
L531-3	1	White	Interior	Northeast Wall and Ceiling	C	NE ( )	I	<0.01
COMMENTS								
COMMENTS								
COMMENTS								
COMMENTS								
COMMENTS								

SUBSTRATE:

W = Wood
M = Metal
C = Concrete
V = Vinyl
D = Drywall
P = Plaster
S = Stucco
L = Laminate
B = Brick
CER = Ceramic
WP = Wallpaper
PL = Plastic

WALL HEIGHT:

(U) = Upper Wall (M) = Mid Wall (L) = Lower Wall

CONDITION:

I = Intact
F = Fair
P = Poor
FR = Friction
IM = Impact
M = Moisture

COMPONENT ASPECT:

(I) = Interior Surface (E) = Exterior Surface

BULK PAINT CHIP LABORATORY REPORT

EMSL Analytical
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

Attn: Shawn Brigham
Law Engineering
605 East Robinson St.
Suite 230
Orlando, FL 32801
Fax: (407) 246-1566 Phone: 407-246-0066
Project: **P-625 NAS II/ 40280-2-2008/x/606/ Bldg 531**

Customer ID: LAWE52H
Customer PO: 27944
Received: 11/14/02 9:40 AM

EMSL Order: 200211344
EMSL Project ID:

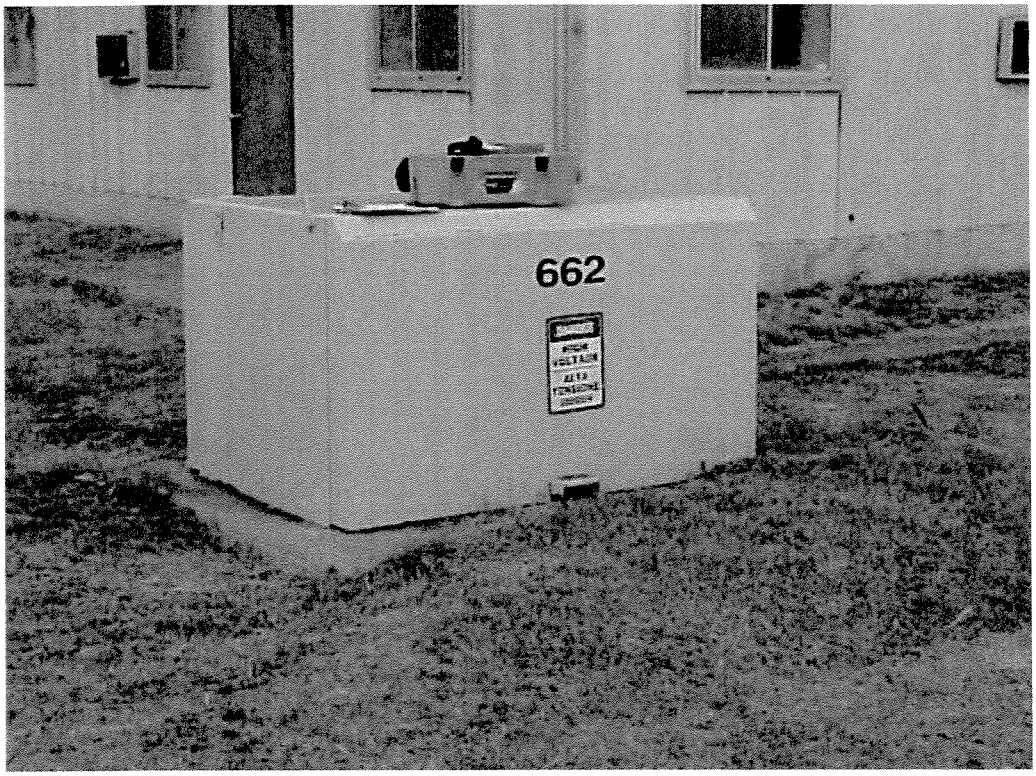
Lead in Paint Chips by Flame AAS (SW 846, 7420)

Client Sample Description	*Lab ID*	*Analyzed*	*Lead Concentration*
L531-1	*0001*	11/20/02	<0.01 % wt
L531-2	*0002*	11/20/02	<0.01 % wt
L531-3	*0003*	11/20/02	<0.01 % wt

Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP: 04653
AIHA: 100194
or other approved signatory

Reporting limit is 0.01 % wt.
ACCREDITATIONS: AIHA Environmental Lead Laboratory Approval Program # 100194

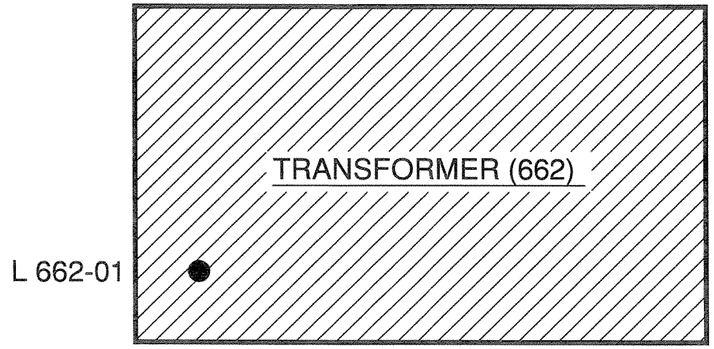
PHOTOGRAPHS



Transformer 662 - Overview

Transformer 662 – Lead-Based Paint Sample Number L-1, beige metal transformer housing.

DRAWINGS



L 662-01

TRANSFORMER #662- PLAN VIEW
SCALE: NTS

N

LEGEND

'X' – LEAD BASED PAINT SAMPLE LOCATION

– ASBESTOS-CONTAINING PCB OIL

LAW
RESOURCES CREATING SOLUTIONS
LAW ENGINEERING & ENVIRONMENTAL SERVICES, INC.
605 E. ROBINSON STREET, SUITE 230 ORLANDO, FL 32801
PHONE: (407) 246-0066 FAX: (407)246-1566
EB 7428 / ZA00000116

PROJECT NAME
TRANSFORMER #662
P-625, SIGONELLA - NAS II
SICILY, ITALY

REVISIONS

NO.	DATE

DRAWN BY: IM
CHECKED BY: PDS
DATE DRAWN: 01.08.03
PROJECT #: 40280-2-2008
PHASE: **
TASK: 606

DRAWING TITLE
ASBESTOS LOCATION PLAN

FIGURE SHEET
AS-1

FACILITY DESCRIPTION

Substation 531 - DESCRIPTION

Substation 531 is housed in a block wall structure with exterior stucco surface coating.

SUMMARY OF ASBESTOS CONTAINING MATERIALS

Table of Confirmed Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Transformer 662
LAW Project 40280-2-2008//606**

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:
No Friable Asbestos Containing Materials Identified					

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

Table of Confirmed Non-Friable Asbestos-Containing Materials
Sigonella – NAS II – Sicily, Italy
Transformer 662
LAW Project 40280-2-2008//606**

Material Description	NESHAP Category	Current Condition	Potential for Disturbance	Recommended Response Action	Homogenous material appears:

No Friable Asbestos Containing Materials Identified

Recommended Response Action Quick Reference:

1. Isolate Area and restrict access. Remove as soon as possible.
2. Include material in an Operations and Maintenance Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.
3. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an Operations and Maintenance Program. Repair or schedule removal when practical and cost effective (numbers indicate priority).

6-7. Include material in an Operations and Maintenance Program. Take preventative measures to reduce disturbance (numbers indicate priority).

8. Include material in an Operations and Maintenance Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAP or until hazard assessment factors change.
9. Non-asbestos containing material.

ASBESTOS FIELD DATA FORMS

ASBESTOS BULK-SAMPLING LABORATORY SHEETS

SUMMARY OF LEAD-BASED PAINT FINDINGS

LEAD-BASED PAINT SAMPLING FORM

JOB NAME: P-625 Base Operations Support – Sigonella NAS II. Sicily, Italy **JOB NO.:** 40280-2-2008 **PHASE:** ** **TASK:** 606

BUILDING: # 662 - Transformer **DATE:** 11/1/02 **SAMPLED BY:** SEB

SAMPLE NO.	FLOOR	COLOR	COMPONENT	LOCATION / HA	SUBSTRATE	ORIENTATION	CONDITION	Pb%
L662-1	0	Beige	Unit	Exterior	M	Top	F-M	<0.01
COMMENTS	Typical of all exterior surfaces							
COMMENTS								
COMMENTS								
COMMENTS								
COMMENTS								
COMMENTS								
COMMENTS								

SUBSTRATE:

W = Wood
M = Metal
C = Concrete
V = Vinyl
D = Drywall
P = Plaster
S = Stucco
L = Laminate
B = Brick
CER = Ceramic
WP = Wallpaper
PL = Plastic

WALL HEIGHT:

(U) = Upper Wall (M) = Mid Wall (L) = Lower Wall

CONDITION:

I = Intact
F = Fair
P = Poor
FR = Friction
IM = Impact
M = Moisture

COMPONENT ASPECT:

(I) = Interior Surface (E) = Exterior Surface

BULK PAINT CHIP LABORATORY REPORT

EMSL Analytical
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

Attn:	Shawn Brigham Law Engineering 605 East Robinson St. Suite 230 Orlando, FL 32801	Customer ID:	LAWE52H
		Customer PO:	27944
		Received:	11/14/02 9:40 AM
Fax:	(407) 246-1566 Phone: 407-246-0066	EMSL Order:	200211343
Project:	**P-625 NAS II /40280-2-2008/x/606/ Bldg 662**	EMSL Project ID:	

Lead in Paint Chips by Flame AAS (SW 846, 7420)

Client Sample Description	*Lab ID*	*Analyzed*	*Lead Concentration*
L662-1	*0001*	11/21/02	<0.01 % wt

Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP 04653
AIHA: 100194
or other approved signatory

Reporting limit is 0.01 % wt.
ACCREDITATIONS: AIHA Environmental Lead Laboratory Approval Program # 100194

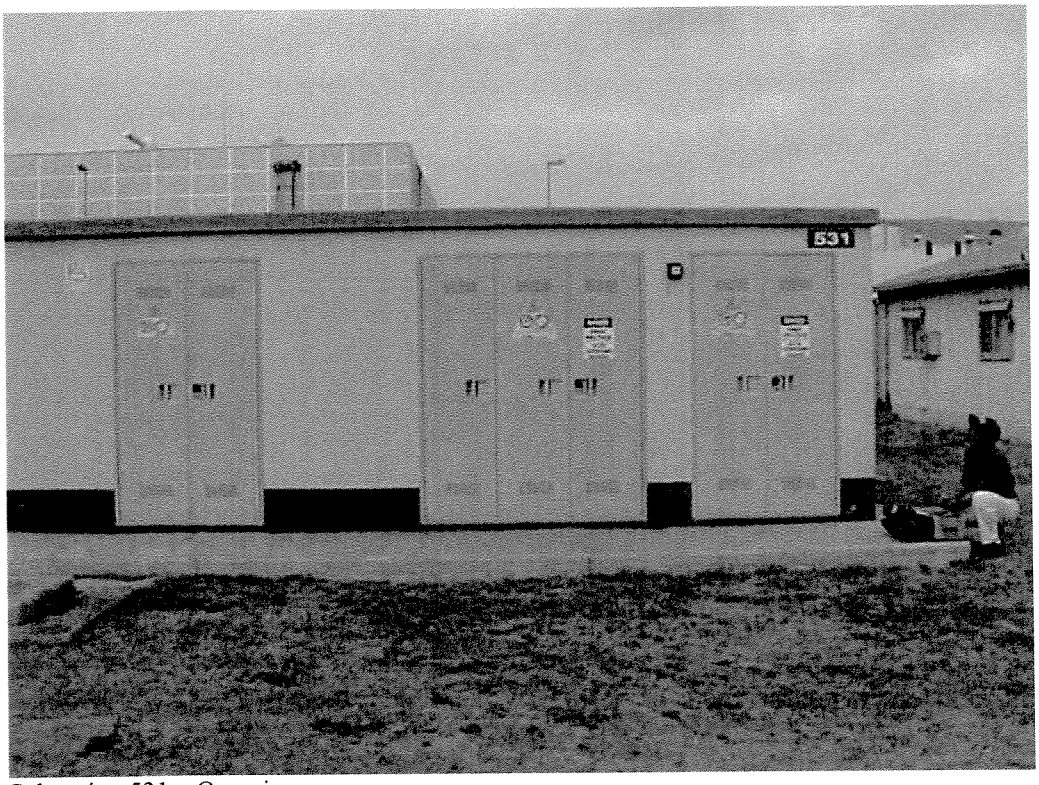
PCB BALLAST AND MERCURY VAPOR LIGHTING
DATA FORM

Mercury Light and PCB Ballast
Summary Sheet
P-625 Base Operations Support – Sigonella NAS II, Sicily, Italy
LAW Project 40280-2-2008/**/606

Transformer # 662

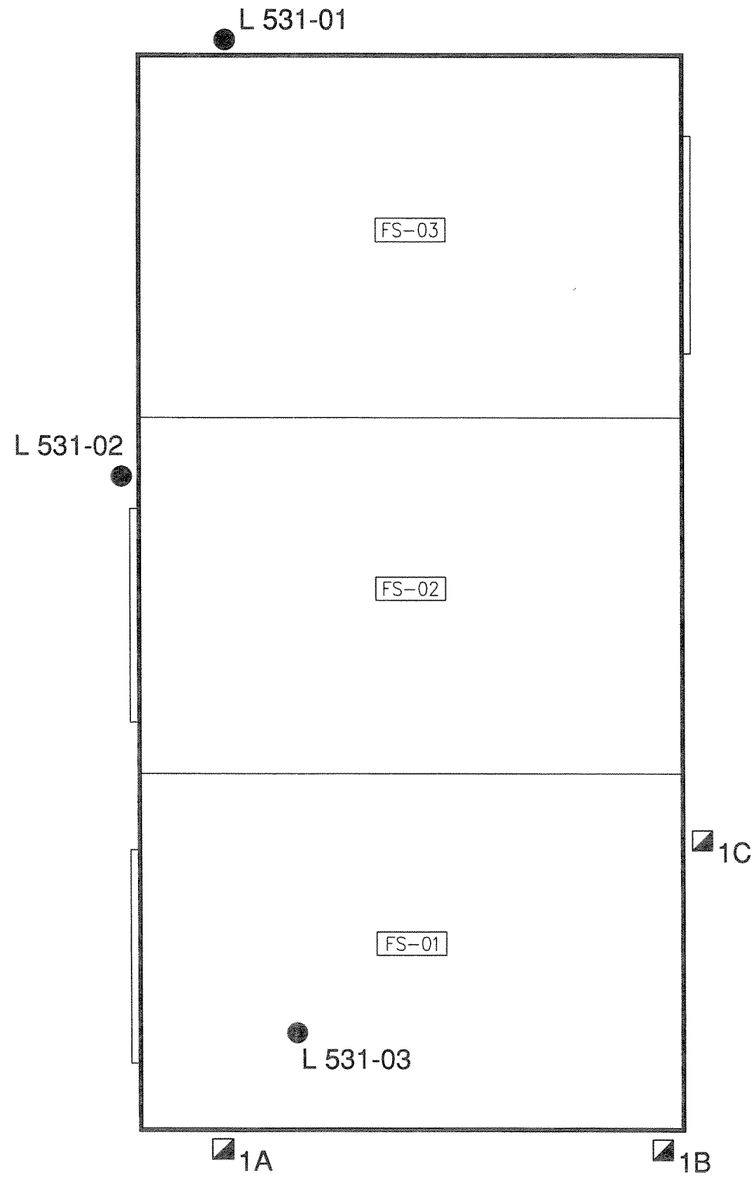
Room Number	Description	Number of Fixtures	Total Number of Ballasts	Total Number of Bulbs
	No PCB Ballast or Mercury Vapor Lighting at Transformer 662			
	Transformer 662 contains PCB oils.	1		

PHOTOGRAPHS



Substation 531 – Overview

DRAWINGS



SUBSTATION #531– PLAN VIEW
SCALE: NTS

N

LEGEND

- 'X' – POSITIVE ASBESTOS–CONTAINING SAMPLE LOCATION
- 'X' – NEGATIVE ASBESTOS–CONTAINING SAMPLE LOCATION
- 'X' – LEAD BASED PAINT SAMPLE LOCATION
- FS.–XX – FUNCTIONAL SPACE

MACTEC
MACTEC ENGINEERING AND CONSULTING, INC.
605 E. ROBINSON STREET, SUITE 230 ORLANDO, FL 32801
PHONE: (407) 246-0066 FAX: (407)246-1566
EB 7428 / ZA0000116

PROJECT NAME
SUBSTATION #531
P-625, SIGONELLA - NAS II
SICILY, ITALY

REVISIONS

NO.	DATE

DRAWN BY: IM
CHECKED BY: PDS
DATE DRAWN: 01.08.03
PROJECT #: 40280-2-2008
PHASE: **
TASK: 606

DRAWING TITLE
ASBESTOS
LEAD SAMPLE
LOCATION
PLAN

FIGURE SHEET
AS-1

A.1 BULK SAMPLING AND LABORATORY ANALYSIS PROTOCOL

The survey was performed by observing accessible exposed building materials throughout the facility while concentrating on mechanical rooms, ventilation systems, and accessible overhead areas.

The bulk sampling procedures utilized for the collection of suspect materials first required the establishment of a homogeneous sampling area. A *homogeneous sampling area* is defined as an area of material of the same color and texture applied during the same general time period. The individual sampling areas were then examined and representative samples of suspect materials were randomly taken.

Samples were collected in accordance with the United States Environmental Protection Agency's [USEPA] Asbestos Hazard Emergency Response Act [AHERA] Protocol. The samples were collected in accordance with the following schedule:

MATERIAL	QUANTITY	NO. OF SAMPLES
SURFACING	<1,000 SF	3
	1,000 - 4,999 SF	5
	>5,000 SF	7
THERMAL SYSTEM INSULATION	<6 SF or 6 LF	1
	>6 SF or 6 LF	3

Non-essential personnel were restricted from the area where the sampling was performed. Members of the field team wore their respirators when sampling took place and the sampler wore gloves, where appropriate. When ceiling tiles were moved, they were moved slowly and kept horizontal.

The area sampled was misted with amended water from a spray bottle and misted during sampling to minimize fiber release. The material was misted and not saturated with water. Extremely wet samples make asbestos analysis difficult and time consuming and may affect analysis by dissolving sample components. The suspect asbestos-containing material was penetrated with a knife, forceps, vial, or corer down to the structural member. The tool that minimized the disturbance to the sampled material, and was least likely to

cause fiber release, and was most efficient for sampling the particular material at hand was used. Asbestos-containing materials are often layered with asbestos product being located in one of those layers. The sample size is approximately 2 sq. cm. in area. Attempts were made to maintain the integrity of all samples. Whenever possible, a sample was collected from previously damaged locations in order to minimize fiber release.

If quality assurance sampling was required as part of this project, then a Quality Assurance Sample was collected immediately adjacent to the primary sample according to the following rules: a) Collect two (2) QA samples every twentieth (20th) primary sample. b) Collect two (2) QA samples per building if fewer than twenty (20) primary samples are collected.

Each sample was placed in a clear plastic container, the outside wet wiped, the cap sealed, and the container labeled. The sample site was sprayed with encapsulant. Duct tape was placed over the sample site to repair the area. The sampling tool was thoroughly cleaned with a damp disposal towel. The sample area was wet-wiped of any fallen debris. If disposable protective clothing was worn, it was removed slowly and turned inside out during removal. All potentially contaminated rags, debris, suits, and/or plastic sheeting was placed into 6-mil plastic bags with asbestos warning labels. These waste bags were returned to the MACTEC's project manager for proper disposal. The respirators were wet-wiped clean and placed in their proper storage containers. The entire area was left in its original condition (i.e. ceiling tiles back in place, lights off, floor clean, furniture replaced, if moved, etc.).

Once a sample had been taken, it was carefully identified with an individual sample number according to the following: a) with a permanent marker label on the sample container. b) A sample field ID number on the site and on the Bulk Sample Chain of Custody Form.

Bulk samples collected during the site survey were returned to a laboratory accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology (NIST). The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining in accordance with EPA Method EPA/600/R-93/116. Polarized Light Microscopy is an analytical method for asbestos identification which depends on the unique optical properties of mineral forms in the samples, and specifically identifies the various asbestos types. This is the mandated method of analysis by EPA for asbestos identification in bulk samples.

The results of the bulk sample analyses are reported in percent asbestos by weight utilizing visual estimation. In accordance with EPA, OSHA, and State of Florida asbestos regulations, materials containing greater than one percent regulated asbestiform minerals are reported as asbestos-containing materials. In accordance with the EPA guidance document "Asbestos NESHAP Clarification Regarding Analysis of Multi-Layered Systems" (Federal Register 542, January 5, 1994), samples of wallboard and joint compound were analyzed as a composite wall system. The laboratory analyzed the wallboard and joint compound separately and then calculated the composite percentage by weight. For example, if no asbestos was detected in the wallboard portion of the sample and the joint compound was found to contain 2% chrysotile asbestos, the result was reported as less than one percent for the composite wall system.

The EPA NESHAP requires that point count analysis be performed for friable samples found to contain less than 10 percent asbestos. As discussed in the EPA Guidance Memorandum, "Clarification of Asbestos NESHAP Requirements to perform Point Counting" dated May 8, 1991, point count analysis is required to confirm the asbestos content of friable materials found to contain one percent or less asbestos and, therefore, not subject to regulation under the NESHAP. Point count analysis was not included in the scope of this survey. For the purposes of this survey, material found to contain greater than one percent to ten percent were assumed to contain asbestos in amounts greater than one percent. Friable materials found to contain one percent or less asbestos by PLM, should have their asbestos contents confirmed by point counting prior to renovation or demolition regulated by the NESHAP which would disturb them.

The EPA guidance document, "Advisory regarding Availability of and Improved Asbestos Bulk sample Analysis Test Method; Supplementary information on Bulk sample Collection and Analysis" (Federal Register 38970-38971, August 1, 1994) which recommends the use of the revised PLM method (which was employed on this project) and the use of Transmission Electron Microscopy (TEM) to confirm the quantity of asbestos detected in floor tile samples. TEM analysis of floor tile samples was not included in the scope of services for this project.

A.1.1 CHAIN OF CUSTODY PROCEDURES

In order to document the chain of custody for each sample, special documentation procedures were utilized during the survey and laboratory analysis. Upon collection in the field, each sample was recorded on the Chain of Custody form for each facility. This form is then included with the shipment of samples to the

laboratory. The chain of custody form is signed by a representative of the laboratory confirming receipt of all samples listed. The chain of custody form for each sample shipment is included with the laboratory analysis sheets in Appendix A to this report.

A.2 SUPPLEMENTAL BULK SAMPLING AND ASSESSMENT PROCEDURES

The supplemental bulk sampling was accomplished to identify potential asbestos-containing materials (ACM) not identified in the previous survey. The survey was performed by observing accessible exposed building materials throughout the facility while concentrating on mechanical rooms, ventilation systems, and accessible overhead areas. We must emphasize that it is not possible to look within every location of a building. The visual survey determines only general locations of suspect materials but does not determine the exact boundaries. No attempt was made to disassemble equipment or demolish structural elements and finishes as this is beyond the scope of our authorized services. Visual observations were made at convenience locations for the presence of floor tile below existing carpet. Due to these limitations, wall voids, building cavities and mechanical equipment, and other areas may contain unreported asbestos-containing materials. The primary purpose of the survey was to locate, identify, and assess friable (or potentially friable) building materials which may contain asbestos minerals. Friable materials are those which can be pulverized or reduced to powder by hand pressure.

A.3 REINSPECTION AND ASSESSMENT PROCEDURES

The survey was performed by observing all known or assumed ACM identified in the original Asbestos Survey. These observations involved a multi-step assessment procedure. In order to provide for consistent assessments among MACTEC personnel, we have adopted the seventh draft of the EPA's "Guidance for Assessing and Managing Exposure to Asbestos in Buildings" document as a guideline. This document is currently used as text in the EPA approved inspector accreditation programs at the TREEO Center of the University of Florida, the GTRI extension of Georgia Tech, as well as numerous other AHERA accreditation courses nationwide.

A.3.1 ASSESSMENT

As the first step in assessment, the suspect material was classified as one of the three general material types: (1) surfacing material; (2) thermal system insulation; or (3) miscellaneous material, as defined in 40 CFR, Part 763.

(1) surfacing material: ACM sprayed or troweled on surfaces, such as acoustical plaster on ceilings and fireproofing material on structural members;

(2) thermal system insulation: ACM applied to pipes, boilers, tanks, ducts, etc. to prevent heat loss or gain or water condensation; and

(3) miscellaneous material: "other" ACM for example, ceiling and floor tiles, wallboard, and cement pipe.

The material was further categorized as friable or non-friable, based on the EPA's definition of a friable material, "when dry, may be crumbled, pulverized, or reduced to powder by hand pressure". Materials that were categorized as non-friable were not assessed beyond this point in accordance with the protocol specified in 40 CFR, Part 763.

Next, for friable materials, an estimation of the material's current condition and percent damage was performed so that the material could be defined as undamaged, damaged, or significantly damaged. Inspectors assigned a relative percent damage to the ACM based on it's physical appearance at the time of the survey. This damage estimate was further defined as being localized damage or distributed damage. Materials observed to have 10 percent or more damage that was distributed over the homogeneous area or less than 25 percent or more damage of the homogeneous area found at a localized area were considered to have "significant damage". Materials with less than 10 percent damage that was distributed over the homogeneous area or comprising 25 percent of the homogeneous area found at a localized area were considered to be "damaged". These semi-quantitative definitions were then used to group friable ACM into one of the following categories.

Damaged Friable Surfacing ACM - Friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such

damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substance; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars, or other signs of physical injury on the ACM. Asbestos debris originating from the ACM in question may also indicate damage.

Significantly Damaged Friable Surfacing ACM - Damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

Damaged or Significantly Damaged Thermal System Insulation - Thermal system insulation on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges, or other signs or physical injury to ACM; occasional water damage on the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.

Damaged Friable Miscellaneous ACM - Friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate, water damage; significant or repeated water stains, scrapes, gouges, mars, or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.

Significantly Damaged Friable Miscellaneous ACM - Damaged friable miscellaneous ACM where the damage is extensive and severe.

Undamaged ACM - ACM with no visible damage or deterioration, or showing only very limited damage or deterioration.

In addition to a relative percent of damage, a further explanation of the type of damage was also performed by characterizing the damage into one of the following general categories.

Deterioration - ACM may deteriorate with age as a result of either poor quality of installation or environmental influences (e.g., heat, humidity, other atmospheric contaminants). These factors affect the cohesive strength of the ACM or adhesion to the substrate (for surfacing material) or the integrity of the protective covering (for thermal insulation). Deterioration of surfacing material can results in increased dusting or fallout of material from the ACM surface, cracking, delamination (i.e., separation into layers), or adhesive failure where the material pulls away from the substrate. Hanging material or coverings and powder or debris on horizontal surfaces are evidence of deterioration.

Physical Damage or Renovation - Accidental or deliberate contact with ACM can result in damage. Evidence of physical damage includes finger marks, graffiti, pieces dislodged or missing, scrape marks from moveable equipment or furniture, or ripped jackets or protective coverings. Powder or debris on floors, shelves, or other horizontal surfaces often confirms the damage and may indicate how recently it occurred.

Water Damage - Water damage is usually caused by roof leaks (particularly in buildings with flat roofs) or plumbing/piping leaks. High humidity in the vicinity of pools, locker rooms, and lavatories can also cause water damage. Water can dissolve and wash out binders in ACM causing this material to blister, delaminate, or even break loose from the surface. Water can also act to transport loose fibers away from the ACM. Subsequent evaporation of the water can leave a dry deposit of fibers which can then be released into the air. Evidence of water damage includes stains or discoloration's on the ACM or protective coverings, walls, and delamination or adhesive failure of the ACM. In some cases, the area of staining may be must smaller than the water damage itself.

A qualitative rating of the material's overall current condition: good, fair, or poor, was also assigned at this point.

Following the damage classifications, the potential of the material to become disturbed was examined. The likelihood that the suspect material could be disturbed in the future is related to (1) the frequency with which service workers need to work near or building occupants are in the vicinity of the material, (2) its location with respect to sources of vibration, and (3) the potential for air erosion. This examination was directed at friable materials and took into account the following factors:

Accessibility - Any ACM that is accessible can be disturbed. This includes any material that can be reached by building occupants or custodial/maintenance personnel, either directly or with equipment or other objects. Nearness of the ACM to heating, ventilation, lighting, and plumbing systems requiring periodic repair or maintenance is a primary cause of the disturbance. Accessibility to other building occupants, especially to students in schools, is another consideration. height above the floor is one measure of accessibility for this group of occupants.

Potential for Contact - The potential of a material to be disturbed or contacted is based on its accessibility as well as activities that occur or might occur in the material's surroundings. This involves an examination of the functional area's use, areas of high traffic or contact within that area, tasks that are normally performed in the area, and proximity of the ACM to those tasks.

Influence of Vibration - High levels of activity such as running and other athletic activities tend to create vibration which accelerates the fiber release process. Vibration from mechanical equipment, road vehicles, and airplanes or from sound waves (e.g., music or noise) may have a similar effect on the ACM. Thus, ACM on the ceiling of a room beneath a gymnasium or on the walls of a music room should be rated as subject to vibration. Likewise, ACM sprayed on ventilation ducts will likely be vibrated by fans or other equipment in the air handling system.

Potential for Air Erosion - An air stream may erode an ACM surface causing fibers to be released. Erosion may occur in an air plenum, in an air or elevator shaft, or downstream from a vent or register. The likelihood that erosion may occur is related to the speed with which the air strikes the surface. Thus, high speed air movement created by the piston

action of an elevator in a elevator shaft is of more concern that air moving at a relatively slow speed through a large air plenum.

Finally, these factors were compiled to produce an overall classification for the ACBM or suspected ACBM assumed to be ACM.

Classification of asbestos-containing material during the assessment was essential for proper selection of response actions.

A.4 RECOMMENDED RESPONSE ACTIONS

Recommendations for response actions were arrived at through the use of "Decision Trees". These flow charts are the proposed method for determining response actions in the USEPA draft document entitled "Guidance for Addressing and Managing Exposure to Asbestos in Buildings". These decision trees estimate the risks posed by the existing ACM and recommend response actions consistent with the AHERA regulations.

When implementing the response actions, parties responsible for final selection should remember that actions shall be sufficient to protect human health and the environment, but may also be the least burdensome method. Nothing in these recommendations should be construed as prohibiting or discouraging removal.

Recommended response actions have been selected for all ACM present within the facility. Number given as response actions in the following table are a general indication of the urgency or priority of the hazard involved and are referenced as follows:

1. Isolate area and restrict access. Remove as soon as possible.

2. Include material in an O&M Program. Repair or remove as soon as possible, or reduce material's potential for disturbance.

3. Include material in an O&M Program. Repair or schedule removal when practical and cost effective, or reduce material's potential for disturbance.

4-5. Include material in an O&M Program. Repair or schedule removal when practical and cost effective. (Numbers indicate priority).

6-7. Include material in an O&M Program. Take preventative measures to reduce disturbance. (Numbers indicate priority).

8. Include in an O&M Program. Continue operations and maintenance until major renovation or demolition requires removal under NESHAPS or until hazard assessment factors change.

A.5 QUALIFICATIONS OF THE REPORT

This report presents the general description of various suspect hazardous or regulated materials identified in the building, and the general locations where these materials were observed. It is possible that other suspect materials are present within the building, but were inaccessible during our survey. If questions arise during the planning for renovation or construction projects as to the presence of identified or additional suspect materials, we should be notified in order to review the conditions and present recommendations.

This report has been prepared on behalf of and exclusively for the use of Roger, Lovelock & Fritz, Inc. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party or be used or relied upon by any other party, in whole or in part, without prior written consent.

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations

certifies that

Shawn E. Brigham

has successfully met certificate requirements for the

Asbestos Abatement Refresher: Facility Survey and Building Systems

(Reaccreditation for Inspector Under TSCA Title II/AHERA)

conducted

January 15, 2002

by the

University of Florida

CERTIFICATE NUMBER

R020250-5038

CEUs: **.4**

Initial exam passed: **6/5/91**

EPA accreditation expires: **January 15, 2003**

SSN: **591-24-9708**

Director

Principal Instructor: Brian J. DuChene, P.E.

Georgia Institute of Technology

This is to certify that

Shawn E. Brigham

605 E. Robinson St., #230
Orlando, FL 32801
591-24-9708

has attended and satisfactorily passed a skills assessment and examination (given in English and held in Atlantic Beach, Florida) covering the contents of a Continuing Education Course entitled:

Inspecting for Lead-Based Paint: An Update

June 24, 1999
Date of Attendance

June 24, 1999
Examination Date

June 24, 2002
Expiration Date

Georgia Tech Research Institute
Electro-Optics, Environment and Materials Laboratory
Atlanta, Georgia 30332
Phone: (404) 894-7430; FAX: (404) 894-1267

Vicki Hanrahan Ainslie
Lead Program Manager

Myrtle I. Turner, CET
Course Director

177
Certificate Number

LITHO IN U.S.A.

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations

certifies that

Paul Santone

has successfully met certificate requirements for the

Asbestos Abatement Refresher: Facility Survey and Building Systems

(Reaccreditation for Inspector Under TSCA Title II/AHERA)

conducted

March 5, 2002

by the

University of Florida

CERTIFICATE NUMBER

R020253-7452

CEUs: .4

Initial exam passed: **2/13/91**

EPA accreditation expires: **March 5, 2003**

SSN: **145-60-9952**

Director

Principal Instructor: Brian J. DuChene, P.E.

University of Florida TREEO Center

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations

certifies that

Robert N. Frasard

has successfully met certificate requirements for the

Asbestos Abatement Refresher: Facility Survey and Building Systems

(Reaccreditation for Inspector Under TSCA Title II/AHERA)

conducted

January 15, 2002

by the

University of Florida

CERTIFICATE NUMBER

R020250-7535

CEUs: .4

Initial exam passed: 10/14/98

EPA accreditation expires: January 15, 2003

SSN: 263-68-5800

Director

Principal Instructor: Brian J. DuChene, P.E.

University of Florida TREEO Center, Asbestos Training Programs • 3900 S.W. 63rd Blvd., Gainesville, FL 32608-3800 • 352/392-9570

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations

certifies that

Brian J. DuChene

has successfully met certificate requirements for the

Asbestos Abatement Refresher: Management Planning

(Reaccreditation for Management Planner Under TSCA Title II/AHERA)

conducted

June 18, 2002

by the

University of Florida

CERTIFICATE NUMBER

R020261-1246

CEUs: **.35**

Initial exam passed: **10/21/88**

EPA accreditation expires: **June 18, 2003**

SSN: **267-73-0340**

Director

Principal Instructor: Russell E. Stauffer, P.E.

UNIVERSITY OF FLORIDA

TREEO CENTER

certifies that

Brian J. DuChene

(605 E. Robinson St., Suite 230, Orlando, FL 32801)
attended

Lead Abatement: Risk Assessment Training

August 3-4, 2000
and is awarded this

Certificate of Course Completion

Certificate Number:	R010157-0067
Expiration Date:	August 4, 2003
Social Security #	267-73-0340
CEU's :	1.6
Test Passed:	August 4, 2000

William T. Engel, Jr., Ph.D.
Director